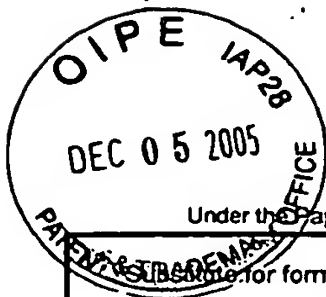


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				Application Number	10/019067-Conf. #7795
				Filing Date	June 28, 2002
				First Named Inventor	Mats PAULSSON
				Art Unit	1641
				Examiner Name	G. W. Counts
Sheet	1	of	1	Attorney Docket Number	HLZ-001US

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Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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GC	C1	International Search Report to PCT/EP00/06025 (June 28, 2000), 4 pages	
GC	C2	International Preliminary Examination Report for PCT/EP00/06025 (June 28, 2000), 7 pages	

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APPLICANT FACSIMILE OF FORM PTO-1441 REV 7-80		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO <b>HLZ-001US</b>	SERIAL NO. <b>10/019067</b>
<div style="text-align: center;"> <p>LIST OF PUBLICATIONS CITED BY APPLICANT (Use several sheets if necessary)</p> <p><b>MAR 21 2002</b></p> <p><b>MAR 26 2002</b></p> </div>				APPLICANT <b>Sardy, Miklos et al.</b>	
				FILING DATE <b>December 21, 2001</b>	

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

## FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

GC	A1	Andberg, M. et al. "Mutation of tyrosine 383 in leukotriene A <sub>4</sub> hydrolase allows conversion of leukotriene A <sub>4</sub> into 5S,6S-dihydroxy-7,9-trans-11,14-cis-eicosatetraenoic acid. Implications for the epoxide hydrolase mechanism," <i>J. Biol. Chem.</i> 1997 Sep 12;272(37):23057-63
GC	A2	Barrett, A.J. et al. Eds. "336. Introduction: family M1 of membrane alanyl aminopeptidase," in <i>Handbook of proteolytic enzymes</i> 1998 Oct; pp. 994-996
GC	A3	Blomster, M. et al. "Evidence for a catalytic role of tyrosine 383 in the peptidase reaction of leukotriene A <sub>4</sub> hydrolase," <i>Eur. J. Biochem.</i> 1995 Aug 1;231(3):528-34
GC	A4	Byrum, R.S. et al. "Determination of the contribution of cysteinyl leukotrienes and leukotriene B <sub>4</sub> in acute inflammatory responses using 5-lipoxygenase- and leukotriene A <sub>4</sub> hydrolase-deficient mice," <i>J. Immunol.</i> 1999 Dec 15;163(12):6810-9
GC	A5	Chen, X.-S. et al. "Role of leukotrienes revealed by targeted disruption of the 5-lipoxygenase gene," <i>Nature</i> 1994 Nov;372:179-182
GC	A6	Crameri, A. et al. "DNA shuffling of a family of genes from diverse species accelerates directed evolution," <i>Nature</i> 1998 Jan 15;391(6664):288-91
GC	A7	Devchand, P.R. et al. "The PPARalpha-leukotriene B <sub>4</sub> pathway to inflammation control," <i>Nature</i> 1996 Nov 7;384(6604):39-43
GC	A8	Dittmann, K.H. et al. "MK-886, a leukotriene biosynthesis inhibitor, induces antiproliferative effects and apoptosis in HL-60 cells," <i>Leuk. Res.</i> 1998 Jan;22(1):49-53
GC	A9	Drazen, J.M. et al. "Treatment of asthma with drugs modifying the leukotriene pathway," <i>N. Engl. J. Med.</i> 1999 Jan 21;340(3):197-206
GC	A10	Evans, J.F. "Leukotriene A <sub>3</sub> . A poor substrate but a potent inhibitor of rat and human neutrophil leukotriene A <sub>4</sub> hydrolase," <i>J. Biol. Chem.</i> 1985 Sep 15;260(20):10966-70
GC	A11	Ford-Hutchinson, A.W. et al. "Leukotriene B, a potent chemokinetic and aggregating substance released from polymorphonuclear leukocytes," <i>Nature</i> 1980 July 17;286:264-65
GC	A12	Funk, C.D. et al. "Molecular cloning and amino acid sequence of leukotriene A <sub>4</sub> hydrolase," <i>Proc. Natl. Acad. Sci. USA</i> 1987 Oct;84(19):6677-81
GC	A13	Griffiths, R.J. et al. "Leukotriene B <sub>4</sub> plays a critical role in the progression of collagen-induced arthritis," <i>Proc. Natl. Acad. Sci. USA</i> 1995 Jan 17;92(2):517-21
GC	A14	Griffiths, R.J. et al. "Collagen-induced arthritis is reduced in 5-lipoxygenase-activating protein-deficient mice," <i>J. Exp. Med.</i> 1997 Mar 17;185(6):1123-9

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LIST OF PUBLICATIONS CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT <b>Sardy, Miklos et al.</b>	
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## FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

GC	B1	Haeggström, J.Z. et al. "Leukotriene A <sub>4</sub> hydrolase: structural and functional properties of the active center," <i>J. Lipid Mediat.</i> 1993 Mar-Apr;6(1-3):1-13
GC	B2	Hogg, J.H. et al. "Probing the activities and mechanisms of leukotriene A <sub>4</sub> hydrolase with synthetic inhibitors," <i>Chem. Eur. J.</i> 1998;4(9):1698-1713
GC	B3	Kuchner, O. et al. "Directed evolution of enzyme catalysts," <i>Trends Biotechnol.</i> 1997 Dec;15(12):523-30
GC	B4	Labaudinière, R. et al. "ω-[(ω-Arylalkyl)thienyl]alkanoic acids: from specific LTA <sub>4</sub> hydrolase inhibitors to LTB <sub>4</sub> receptor antagonists," <i>J. Med. Chem.</i> 1992 Aug 21;35(17):3170-9
GC	B5	Lewis, R.A. et al. "Leukotrienes and other products of the 5-lipoxygenase pathway. Biochemistry and relation to pathobiology in human diseases," <i>N. Engl. J. Med.</i> 1990 Sep 6;323(10):645-55
GC	B6	Lorsch, J.R. et al. "In vitro evolution of new ribozymes with polynucleotide kinase activity," <i>Nature</i> 1994 Sep 1;371(6492):31-6
GC	B7	Medina, J.F. et al. "Leukotriene A <sub>4</sub> hydrolase: determination of the three zinc-binding ligands by site-directed mutagenesis and zinc analysis," <i>Proc. Natl. Acad. Sci. USA</i> 1991 Sep 1;88(17):7620-4
GC	B8	Ménard, A. et al. "The cytotoxic activity of Bacillus anthracis lethal factor is inhibited by leukotriene A <sub>4</sub> hydrolase and metallopeptidase inhibitors," <i>Biochem. J.</i> 1996 Dec 1;320 ( Pt 2):687-91
GC	B9	Mueller, M.J. et al. "Leukotriene A <sub>4</sub> hydrolase: mapping of a henicosapeptide involved in mechanism-based inactivation," <i>Proc. Natl. Acad. Sci. USA</i> 1995 Aug 29;92(18):8383-7
GC	B10	Mueller, M.J. et al. "Leukotriene A <sub>4</sub> hydrolase: protection from mechanism-based inactivation by mutation of tyrosine-378," <i>Proc. Natl. Acad. Sci. USA</i> 1996 Jun 11;93(12):5931-5
GC	B11	Mueller, M.J. et al. "Leukotriene A <sub>4</sub> hydrolase, mutation of tyrosine 378 allows conversion of leukotriene A <sub>4</sub> into an isomer of leukotriene B <sub>4</sub> ," <i>J. Biol. Chem.</i> 1996 Oct 4;271(40):24345-8
GC	B12	Nord, K. et al. "Binding proteins selected from combinatorial libraries of an alpha-helical bacterial receptor domain," <i>Nat. Biotechnol.</i> 1997 Aug;15(8):772-7
GC	B13	Orning, L. et al. "Inhibition of leukotriene A <sub>4</sub> hydrolase/aminopeptidase by captopril," <i>J. Biol. Chem.</i> 1991 Sep 5;266(25):16507-11
GC	B14	Orning, L. et al. "The bifunctional enzyme leukotriene- A <sub>4</sub> hydrolase is an arginine aminopeptidase of high efficiency and specificity," <i>J. Biol. Chem.</i> 1994 Apr 15;269(15):11269-73
Examiner		Date Considered
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## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

GC	C1	Owman, C. et al. "The leukotriene B <sub>4</sub> receptor functions as a novel type of coreceptor mediating entry of primary HIV-1 isolates into CD4-positive cells," <i>PNAS. USA</i> 1998 Aug 4;95(16):9530-4
GC	C2	Rola-Pleszczynski, M. et al. "Leukotrienes augment interleukin 1 production by human monocytes," <i>J. Immunol.</i> 1985 Dec;135(6):3958-61
GC	C3	Samuelsson, B. "Leukotrienes: mediators of immediate hypersensitivity reactions and inflammation," <i>Science</i> 1983 May 6;220(4597):568-75
GC	C4	Samuelsson, B. et al. "Leukotrienes and lipoxins: structures, biosynthesis, and biological effects," <i>Science</i> 1987 Sep 4;237(4819):1171-6
GC	C5	Serhan, C.H. et al. "Lipid mediator networks in cell signaling: update and impact of cytokines," <i>FASEB J.</i> 1996 Aug;10:1-12
GC	C6	Tsuge, H. et al. "Crystallization and preliminary X-ray crystallographic studies of recombinant human leukotriene A <sub>4</sub> hydrolase complexed with bestatin," <i>J. Mol. Biol.</i> 1994 May 20;238(5):854-6
GC	C7	Vallee, B.L. et al. "Active-site zinc ligands and activated H <sub>2</sub> O of zinc enzymes," <i>Proc. Natl. Acad. Sci. USA</i> 1990 Jan;87(1):220-4
GC	C8	Wetterholm, A. et al. "Recombinant mouse leukotriene A <sub>4</sub> hydrolase: a zinc metalloenzyme with dual enzymatic activities," <i>Biochim. Biophys. Acta</i> 1991 Oct 25;1080(2):96-102
GC	C9	Wetterholm, A. et al. "Leukotriene A <sub>4</sub> hydrolase: abrogation of the peptidase activity by mutation of glutamic acid-296," <i>Proc. Natl. Acad. Sci. USA</i> 1992 Oct 1;89(19):9141-5
GC	C10	Wetterholm, A. et al. "Potent and selective inhibitors of leukotriene A <sub>4</sub> hydrolase: effects on purified enzyme and human polymorphonuclear leukocytes," <i>J. Pharmacol. Exp. Ther.</i> 1995 Oct;275(1):31-7
GC	C11	Yamaoka, K.A. et al. "Leukotriene B <sub>4</sub> enhances activation, proliferation, and differentiation of human B lymphocytes," <i>J. Immunol.</i> 1989 Sep 15;143(6):1996-2000
GC	C12	Yokomizo, T. et al. "A G-protein-coupled receptor for leukotriene B <sub>4</sub> that mediates chemotaxis," <i>Nature</i> 1997 Jun 5;387(6633):620-4
GC	C13	Yokomizo, T. et al. "A second leukotriene B <sub>4</sub> receptor, BLT2. A new therapeutic target in inflammation and immunological disorders," <i>J. Exp. Med.</i> 2000 Aug 7;192(3):421-32
GC	C14	Yuan, W. et al. "Novel tight-binding inhibitors of leukotriene A <sub>4</sub> hydrolase," <i>J. Am. Chem. Soc.</i> 1992 April;114:6552-53
GC	C15	GenPept Acc. No. S65947; leukotriene-A4 hydrolase (EC 3.3.2.6) long isoform - human

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